Please type a plus sign inside this box -

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/797,239	
Filing Date	March 9, 2004	
First Named Inventor	Alan J. Heeger, et al.	
Group Art Unit	2997	
Examiner Name	Not Yet Assigned	
Attorney Docket Number	1279-404XX/10303106	

ENCLOSURES (check all that apply)					
Fee Transmit	ttal Form	Assignment Papers (for an Application)	After Allowance Communication to Group		
Fee Att	tached	Drawing(s)	Appeal Communication to Board of Appeals and Interferences		
Amendment/	Reply	Licensing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)		
After F	inal	Petition	Proprietary Information		
Affidav	its/declaration(s)	Petition to Convert to a Provisional Application	Status Letter		
Extension of	Time Request	Power of Attorney, Revocation Change of Correspondence Address	X Other Enclosure(s) (please identify below)		
Express Aba	ndonment Request	Terminal Disclaimer	1. PTO-1449 FORM (SB/08B) 2. CITED ARTICLES;		
X Information Disclosure Statement		Request for Refund	3. POSTCARD		
Certified Copy of Priority Document(s)		CD, Number of CD(s)			
Response to Missing Parts/ Incomplete Application		Remarks			
Response to Missing Parts under 37 CFR 1.52 or 1.53					
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT					
	Robert Berliner				
Signature	Signature				
Date	September 10, 2004				

Transmittal	of Information	Disclosure	Statemen
-------------	----------------	------------	----------

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail, in an envelope addressed to: Mail Stop: IDS, Commissioner for Patents, P.O. Box 1450, Alexandria, yA, 22343-1450, on the date shown below.

Dated: September 10, 2004

AIDE G/SILVA

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail, in an envelope addressed to: Mail Stop: IDS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: Sent 10 2004

gnature: (Aida C' Silva)

Docket No.: 1279-404XX

(PATENT)

SEP 1 3 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Alan J. Heeger, et al.

Application No.: 10/797,239

)

Confirmation No.: 2997

Filed:

March 9, 2004

Art Unit: 2811

For:

INJECTION LASERS FABRICATED

_~ ;

Examiner: Not Yet Assigned

FROM SEMICONDUCTING POLYMERS

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop: IDS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed, as far as is known to the undersigned, before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)). No certification or fee is required.

A copy of each cited article on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information 25452931.1

Application No.: 10/797,239 Docket No.: 1279-404XX/10303106

as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

A concise explanation of relevance of the items listed on form PTO/SB/08 is:

[X] not given

- [] given for each listed item
- [] given for only non-English language listed items
- [] in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0337, under Order No.

1279-404XX/10303106. A duplicate copy of this paper is enclosed.

Dated: September 10, 2004

Respectfully submitted,

Robert Berliner, Reg. No. 20,121

Attorney for Applicant

FULBRIGHT & JAWORSKI L.L.P.

865 South Figueroa

Twenty-Ninth Floor

Los Angeles, California 90017-2571

(213) 892-9200

(213) 680-4518 (Fax)

25452931.1 25452931_1.DOC

PTO/SB/08B (10-01)

Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE der the sepenwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known for form 1449B/PTO Application Number 10/797,239 INFORMATION DISCLOSURE Filing Date March 9, 2004 STATEMENT BY APPLICANT First Named Inventor Alan J. Heeger, et al. Group Art Unit 2997 (use as many sheets as necessary) Examiner Name Not Yet Assigned 2 1279-404XX/10303106 Attorney Docket Number Sheet

	_		U.S.	PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication D MM-DD-YY		me of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	5,237,582	08-17-199	3 MOSES		
	AB	5,881,083	03-09-199	9 DIAZ-GA	RCIA, ET AL.	
	AC					
	AD					
	AE					
	AF				· · · · · · · · · · · · · · · · · · ·	
	ــــــــــــــــــــــــــــــــــــــ	<u> </u>	FOREIC	N PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Foreign Patent Docur Country Code ³ -Number ⁴ -Kind C	ment	Publication Date MM-DD-YYYY	T .	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BA					
	BB					

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	"Polymer Light-Emitting Electrochemical Cells", By QIBING PEI, et al.; Science, Vol. 269, August 25, 1995, pg. 1086	
	СВ	"Femtosecond Relaxation of Photoexcitations in a Poly (<i>Para-</i> Phenylene)-Type Ladder Polymer", By W. GRAUPNER, G. LEISING et al.; <i>Physical Review Letters</i> , Vol. 76, No. 5, January 29, 1996; pg. 847	
	CC	"Laser Emission from Solutions and Films Containing Semiconducting Polymer and Titanium Dioxide Nanocrystals", By FUMITOMO HIDE, BENJAMIN J. SCHWARTZ, et al.; Chemical Physics Letters 256 (1996) 424-430; July 5, 1996	
	CD	"Semiconducting Polymers: A New Class of Solid-State Laser Materials", By FUMITOMO HIDE, MARIA A. DIAZ-GARCIA, et al.; Science, Reprint Series, Sept. 27, 1996, Vol. 273, pp. 1833-1836	
	CE	"Polymer Light-Emitting Electrochemical Cells; In Situ Formation of a Light-Emitting p – n Junction", By QIBING PEI, YANG YAN, GANG YU, et al.; J. American Chemical Society, 1996, 188, 3922-3929	
	CF	"Cooperative Emission in π-Conjugated Polymer Thin Films", By S.V. FROLOV, W. GELLERMANN, M. OZAKI, et al.; <i>Physical Review Letters</i> , Vol. 78, No. 4, January 27, 1997, pp. 729-732	
	CG	"'Plastic' Lasers: Comparison of Gain Narrowing with a Soluble Semiconducting Polymer in Waveguides and Microcavities", By MARIA A. DIAZ-GARCIA, FUMITOMO HIDE, et al.; 1997 American Institute of Physics, Appl. Phys. Let. 70 (24), June 16, 1997, pp 3191.	
	СН	"Polymer Light-Emitting Electrochemical Cells with Frozen p-i-n Junction", By JUN GAO, GANG YU, ALAN J. HEEGER, et al.; 1997 American Institute of Physics, Appl. Phys. Lett. 71	

PTO/SB/08B (10-01)

Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

O. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

C TO	4 TBAStitute for form 1449B/PTO		Complete if Known		
				Application Number	10/797,239
١N	VEORMATION	N DI	SCLOSURE	Filing Date	March 9, 2004
S	TATEMENT I	BY A	APPLICANT	First Named Inventor	Alan J. Heeger, et al.
				Group Art Unit	2997
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	1279-404XX/10303106

	(10), Sept. 8, 1997, pp. 1293.
CI	"Peak Current Density and Brightness from Poly (p-phenylenevinylene) Based Light Emitting Diodes", By N.T. HARRISON, N. TESSLER, C.J. MOSS, K. PICHLER, R.H.
	FRIEND; Optical Materials 9 (1998) 178-182, January 1998
Cl	"High Peak Brightness Polymer Light-Emitting Diodes", By N. TESSLER, N.T. HARRISON, RICHARD H. FRIEND; Advanced Materials 1998, 10, No. 1, pp. 64.
СК	"Polymer Light-Emitting Electrochemical Cells with Frozen p-i-n Junction at Room Temperature", By GANG YU, YONG CAO, MATS ANDERSON, JUN GAO and ALAN J. HEEGER; Advanced Materials, 1998, Vol. 10, No. 5, pp. 385.
CL	"Amplified Spontaneous Emission from Photopumped Films of a Conjugated Polymer", By McGEHEE, GUPTA, VEENSTRA, MILLER, DIAZ-GARCIA, and HEEGER; <i>Physical Review B</i> , Volume 58, No. 11, Sept. 15, 1998, pp. 7035.
СМ	"Low-Threshold Amplified Spontaneous Emission in Blends of Conjugated Polymers", By R. GUPTA, M. STEVENSON, A. DOGARIU, M.D. McGEHEE, J.Y. PARK, V. SRDANOV and A.J. HEEGER; Applied Physics Letters, Volume 73, No. 24, December 14, 1998, pp. 3492
CN	"Structures for Organic Diode Lasers and Optical Properties of Organic Semi- conductors Under Intense Optical and Electrical Excitations", By V.G. KOZLOV, G. PARTHASARATHY, et al.; IEEE Journal of Quantum Electronics, Vol. 36, No. 1, January 2000.
СО	"Semiconducting (Conjugated) Polymers as Materials for Solid-State Lasers", By M.D. McGEHEE and A.J. HEEGER; <i>Advanced Materials</i> , 2000, Vol. 12, No. 22, November 16, 2000, pp. 1655 – 1668.
СР	"Synthesis of Soluble Phenyl-Substituted Poly (p-phenylenevinylenes) with a Low Content of Structural Defects", By D.M. JOHANSSON, X. WANG, T. JOHANSSON, et al.; Macromolecules, 2002, Vol. 35, No. 13, 4997-5003
CQ	"Single-Component Light-Emitting Electrochemical Cell with Improved Stability", By L. EDMAN, M. PAUCHARD, B. LIU, G. BAZAN, D. MOSES and A.J. HEEGER; Applied Physics Letters, Vol. 82, Number 22, June 2, 2003.
CR	"Light Amplification in Polymer Field Effect Transistor Structures", By M. PAUCHARD, J. SWENSEN, D. MOSES and A.J. HEEGER; Journal of Applied Physics, Vol. 94, Number 5, Sept. 1, 2003, pp. 3543

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.usplo.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.